

The Commonwealth of Massachusetts  
Executive Office of Health and Human Services  
Department of Public Health  
**William A. Hinton State Laboratory Institute**  
305 South Street, Jamaica Plain, MA 02130

DEVAL L. PATRICK  
GOVERNOR

TIMOTHY P. MURRAY  
LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD  
SECRETARY

JOHN AUERBACH  
COMMISSIONER

Adam Foss, ADA

Suffolk County District Attorney's Office  
By e-mail

April 25, 2011

Re: Comm. v. [REDACTED]

ADA Foss,

Please find enclosed a discovery packet for the case noted above. The material is collated in the following manner:

- 1) the chemists' c.v.'s
- 2) the evidence office receipt to the Boston Police
- 2) inventory control cards for the submissions
- 3) the bench notes on the "Drug Powder Analysis Forms"
- 4) the gas chromatography/mass spectrometry (gc/ms) data

I was the custodial chemist responsible for weighing the sample and performing the preliminary tests. Ms. Khan performed the gas chromatography/mass spectrometry (gc/ms). If you need further clarification of this material, please call me directly at (617) 983-6627.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Lawler".

Michael Lawler  
Senior Chemist

Cc: Charles Salemi, Annie Khan

## Curriculum Vitae

### Michael Lawler

#### **Education:**

University of Virginia, Charlottesville, Va. Bachelor of Arts in English, 1975

Harvard University, Cambridge, Ma. Master of Arts in biology, 1995

#### **Experience:**

**1990-present** currently Chemist III, Mass. Dept. of Public Health, Drug Lab analyst determining the identity of unknown substances and providing expert testimony in the Courts. Conduct special testing for poisons within drug exhibits.

**2005-present** lecturer in chemistry, Curry College, Milton, Ma.

**1988-1990** New England Newborn Screening (NENS) Biochemist conducting pilot studies and validation trials of new newborn screening tests. Investigator and co-author of papers noted below. Introduced screening test for Biotinidase Deficiency. Liaison with interstate collaborators in national studies.

**1983-1988** Supervised NENS urine screening lab for metabolic disorders. Conducted research in collaboration with Children's Hospital (Boston) detecting neuroblastoma, a cancer of early childhood. Conducted reference testing for rare metabolic disorders for an international audience.

**1982-1983** NENS hypothyroid assay technologist with Tuft's University

**1979-1981** Mass. Bay Community College, staff technologist preparing materials for the laboratory technician program, which included reagents, apparatus and maintaining stock cultures of human pathogens.

#### **Additional education and special training**

Drug Analysis, completed six week training course by senior staff within the Department of Public Health Drug Analysis Laboratory

National Laboratory Network Training Program course as Expert Witness

Qualified as an expert witness in the Massachusetts Courts and the U.S. District Court  
CDC course in cell culture

CDC course in antibiotic resistance

CDC course in public health response to bioterrorism

U.S. Army course in biologic warfare and terrorism

#### **Journal Publications**

Screening, 1992, 1:34-37; Lawler,M., Frederick,S., Rodriguez-Anza, S., Wolf,B., Levy,H., *Newborn Screening for Biotinidase Deficiency, Pilot Study and Follow-up of Identified Cases*

Genetic Screening, 1990, 11-18, Mitchell,M., Lawler,M., Walraven,C., Hermos,R., *To Screen or Not to Screen for Congenital Hyperplasia: Is that the Question?*

The Journal of Pediatrics, 116: 78-83, Secor-McVoy,J., Lawler,M., Schmidt, M., Ebers,D., Hart,P., Pettit,D., Blitzer,M., Wolf,B., *Partial Biotinidase Deficiency: Clinical and Biochemical Features*

#### **Professional Affiliations**

Northeastern Association of Forensic Scientists (NEAFS) since 2005

#### **Awards**

Theobald Smith Education Grant for graduate studies

## Curriculum Vitae

### Annie Khan (Dookhan)

#### **Education:**

University of Massachusetts, Boston, Ma, Master of Science in Chemistry.  
University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

#### **Experience:**

2003 – present

#### Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- \*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- \*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.
- \*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- \*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- \*Maintenance and repairs of all analytical instruments.
- \*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- \*Responsible for the Quality Control/Quality Assurance program for the drug lab.
- \*Notary Public.
- \*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 – 2003

#### QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- \*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.
- \*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.
- \*Writing, revising and reviewing Standard Operating Procedures (SOPs).
- \*Trained and supervised new chemists and interns for the department.
- \*Routine QC testing of products for the FDA.
- \*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- \*Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- \*Complete testing of chemicals for Vendor Validation Project for the FDA.
- \*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

#### **Additional Training:**

Dept. of Justice – Forensics Professionals. (numerous trainings)  
GLP/GMP course with Massachusetts Biologic Laboratory.  
QC/QA training according to FDA Codes and Regulations.  
GC and GC/MS courses with Agilent Technologies and Restek.  
HPLC course with Waters Cooperation.  
FTIR course with Spectros.  
TOC training with MBL and Sievers.

#### **Association:**

American Chemical Society (ACS)  
Northeastern Association of Forensics Science (NEAFS)



**DRUG RECEIPT**

CC # XXXXXXXXXX  
BOOK # 28  
PAGE # 195  
DESTRUCTION # XXXXXXXXXX

District/Unit DCU/E-13

Name & Rank of Arresting Officer P. O. HAESER ID# 11129

**To be completed by ECU personnel only**

Name and Rank of Submitting Officer Maj S ID# 3800

Received by Elie Date 7-12-10

Date 7-12-10

ECU Control # \_\_\_\_\_

No. [REDACTED] Date Analyzed: 09-03-10  
City: Boston D.C.U. Police Dept.  
Officer: P.O. CRAIG SMALLS  
Def: [REDACTED]  
Amount: [REDACTED] Subst: SUB  
No. Cont: 2 Cont: pb  
Date Rec'd: 07/12/2010 No. Analyzed: 1  
Gross Wt.: 2.604 Net Weight: 0.269  
# Tests: 5/10/10  
Prelim: Heroin Findings: • 2480 Heroin

No. [REDACTED] Date Analyzed: 09-03-10  
City: Boston D.C.U. Police Dept.  
Officer: P.O. CRAIG SMALLS  
Def: [REDACTED]  
Amount: Subst: SUB  
No. Cont: 1 Cont: pb  
Date Rec'd: 07/12/2010 No. Analyzed:  
Gross Wt.: 2.24 ✓ Net Weight: 0.22g  
# Tests: 5/10  
Prelim: *Levin* Findings: Heroin

GCIM 8  
GONZALO

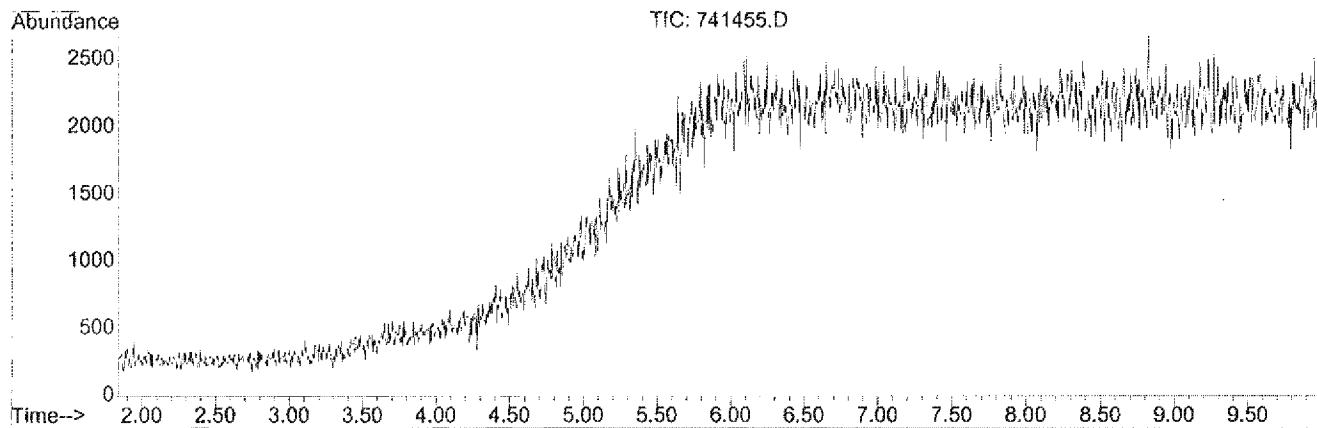
GCIM 8  
GONZALO

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Information from Data File:

File Name : F:\Q3-2010\SYSTEM7\09\_02\_10\741455.D  
Operator : ASD  
Date Acquired : 2 Sep 2010 21:09  
Sample Name : BLANK  
Submitted by :  
Vial Number : 2  
AcquisitionMeth: DRUGS  
Integrator : RTE

✓ASD  
4-21-11



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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

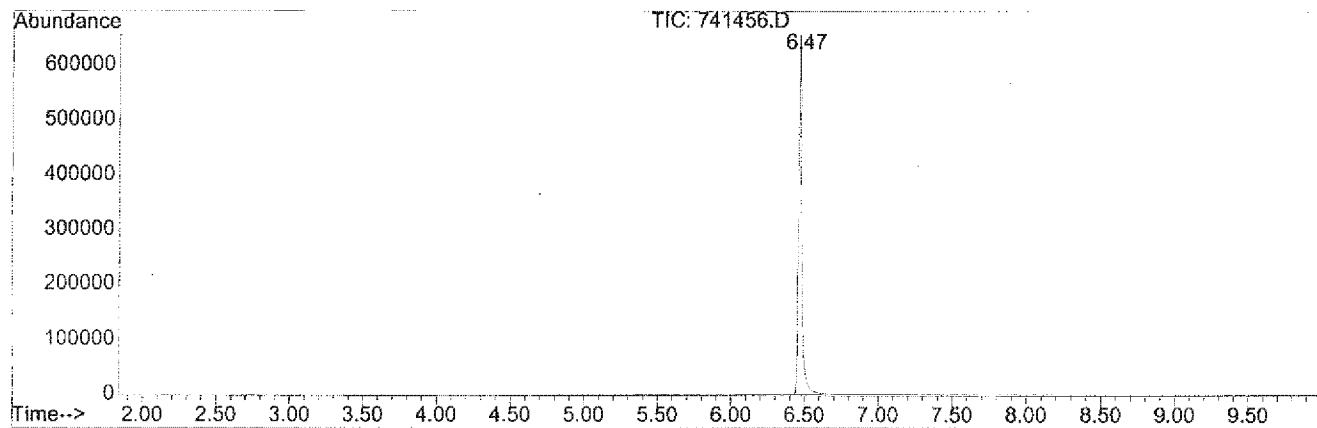
Area Percent / Library Search Report

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Information from Data File:

File Name : F:\Q3-2010\SYSTEM7\09\_02\_10\741456.D  
Operator : ASD  
Date Acquired : 2 Sep 2010 21:21  
Sample Name : HEROIN STD  
Submitted by :  
Vial Number : 56  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
6.465	1011259	100.00	100.00

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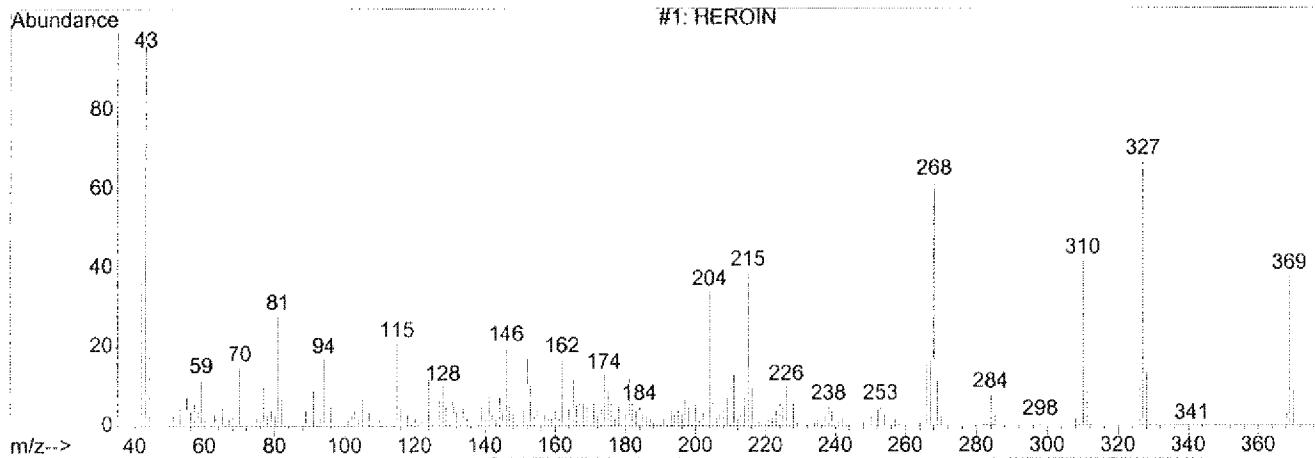
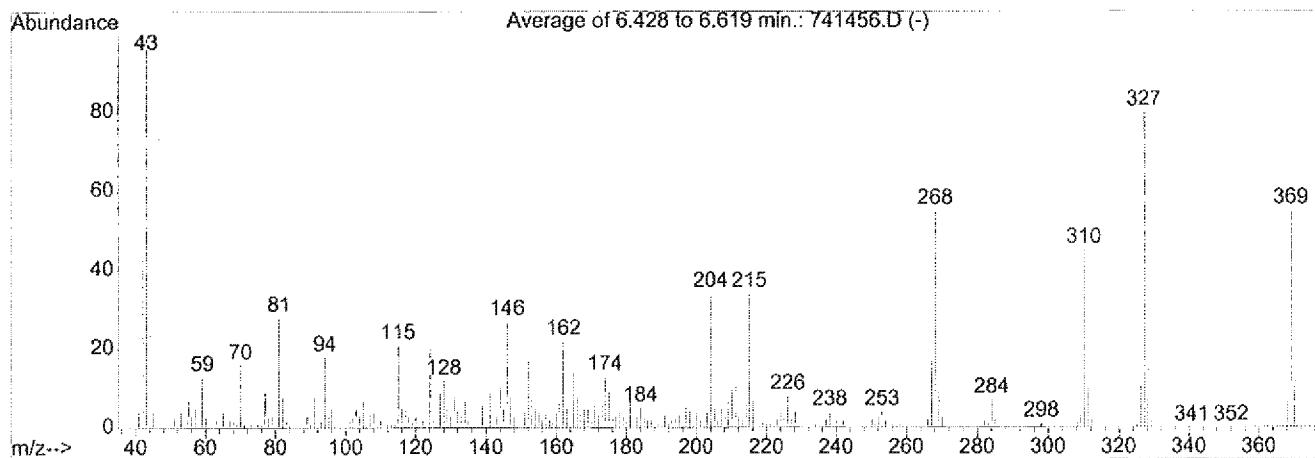
# Area Percent / Library Search Report

**Information from Data File:**

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Operator : ASD  
Date Acquired : 2 Sep 2010 21:21  
Sample Name : HEROIN STD  
Submitted by :  
Vial Number : 56  
AcquisitionMeth: DRUGS  
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	6.47	C:\DATABASE\SLI.L HEROIN	000561-27-3	99

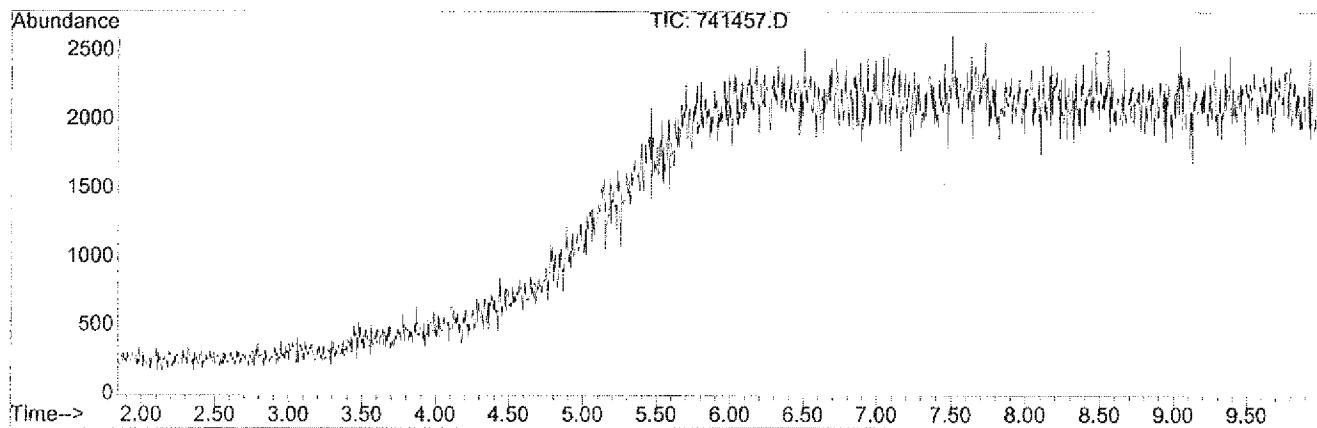


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Operator : ASD  
Date Acquired : 2 Sep 2010 21:34  
Sample Name : BLANK  
Submitted by : SLD  
Vial Number : 2  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

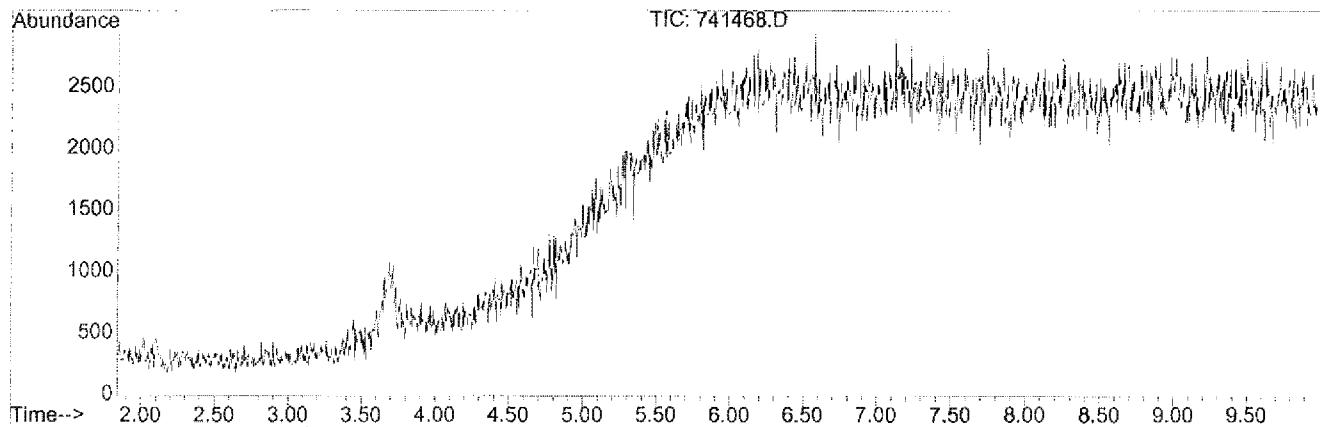
# Area Percent / Library Search Report

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Operator : ASD  
Date Acquired : 2 Sep 2010 23:53  
Sample Name : BLANK  
Submitted by : MGL  
Vial Number : 2  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

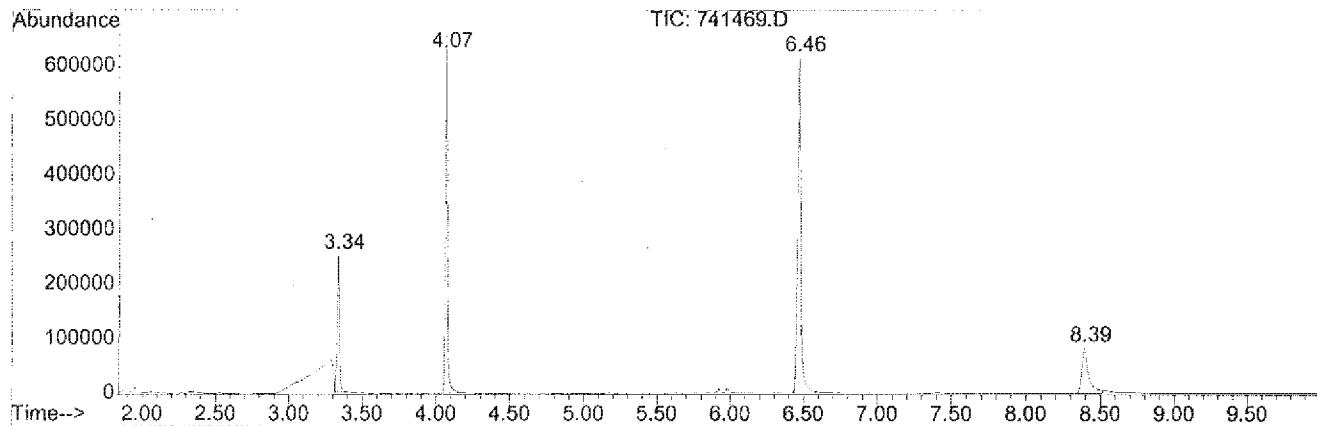
# Area Percent / Library Search Report

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## Information from Data File:

File Name : F:\Q3-2010\SYSTEM7\09\_02\_10\741469.D  
Operator : ASD  
Date Acquired : 3 Sep 2010 00:06  
Sample Name : XXXXXXXXXX  
Submitted by : MGL  
Vial Number : 69  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
3.335	259208	12.26	26.93
4.066	631244	29.86	65.58
6.465	962523	45.52	100.00
8.392	261315	12.36	27.15

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# Area Percent / Library Search Report

**Information from Data File:**

File Name : F:\Q3-2010\SYSTEM7\09\_02\_10\741469.D  
Operator : ASD  
Date Acquired : 3 Sep 2010 00:06  
Sample Name : XXXXXXXXXX  
Submitted by : MGL  
Vial Number : 69  
AcquisitionMeth: DRUGS  
Integrator : RTE

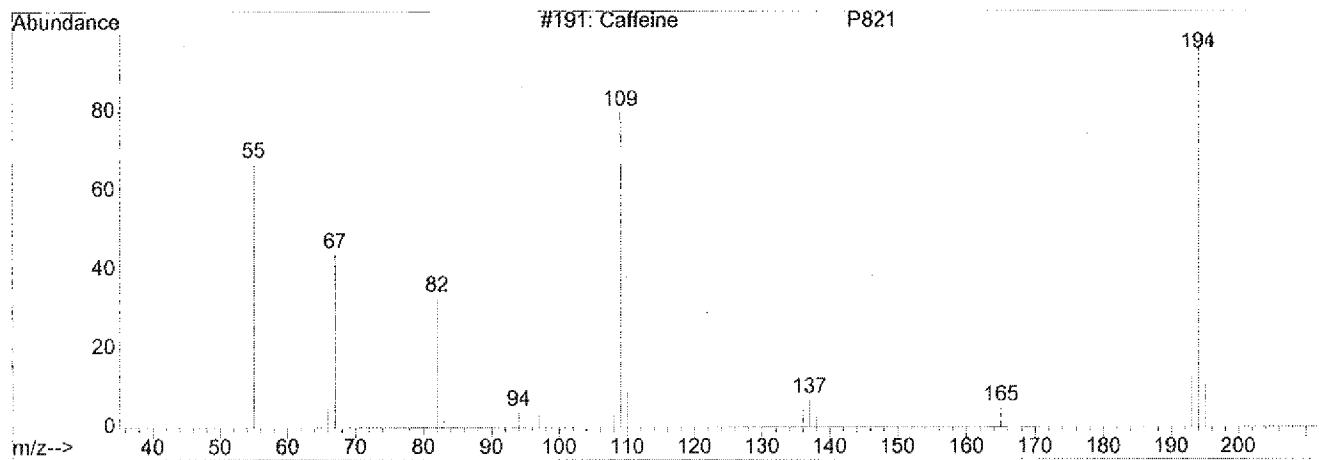
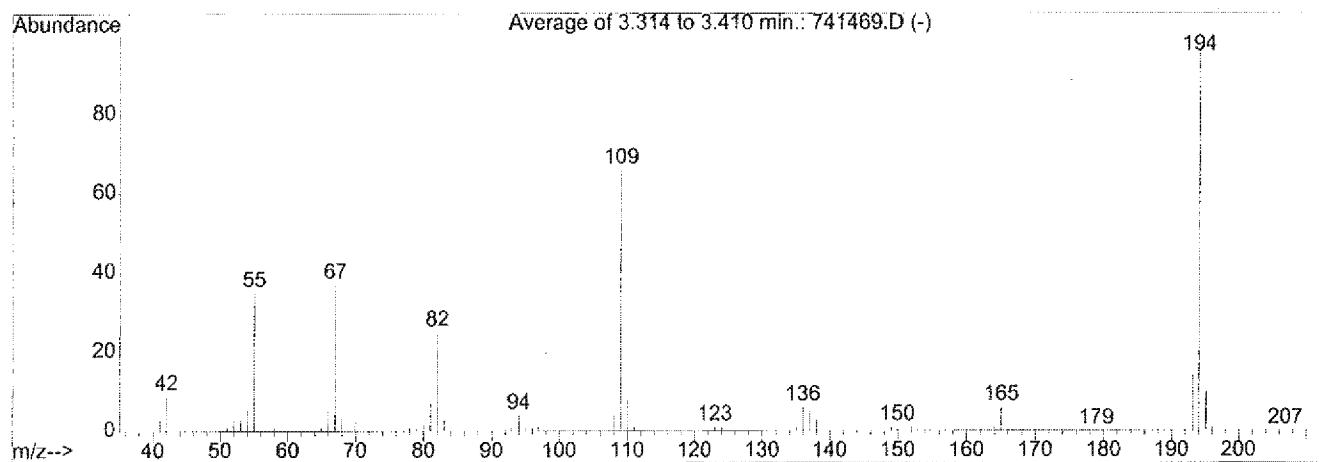
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Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
C:\DATABASE\NIST98.L

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PK#	RT	Library/ID	CAS#	Qual
1	3.34	C:\DATABASE\PMW_TOX2.L		
		Caffeine	000058-08-2	95
		Proxyphylline	000603-00-9	4
		Dimetacrine-M (ring)	006267-02-3	4

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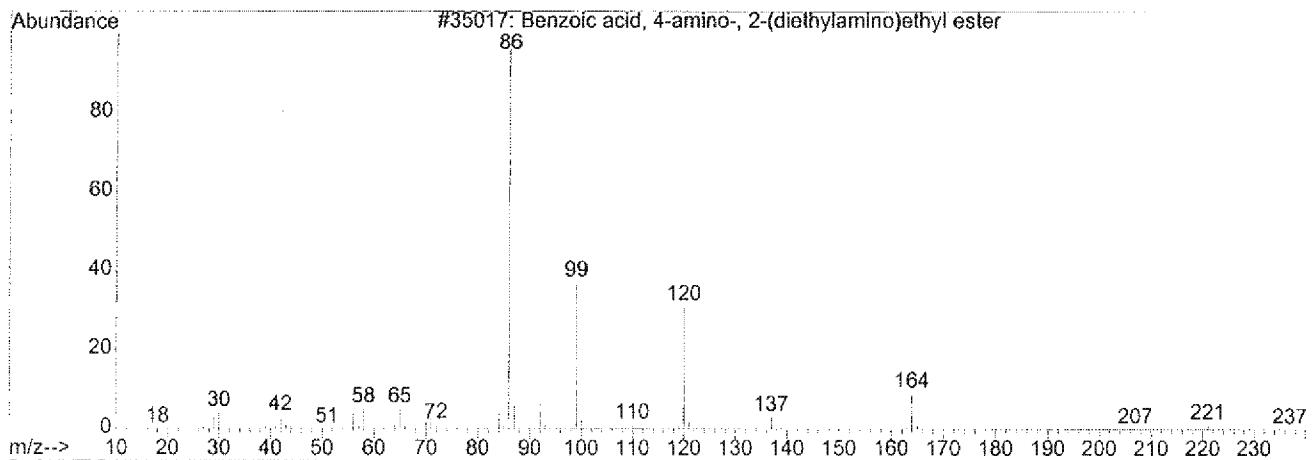
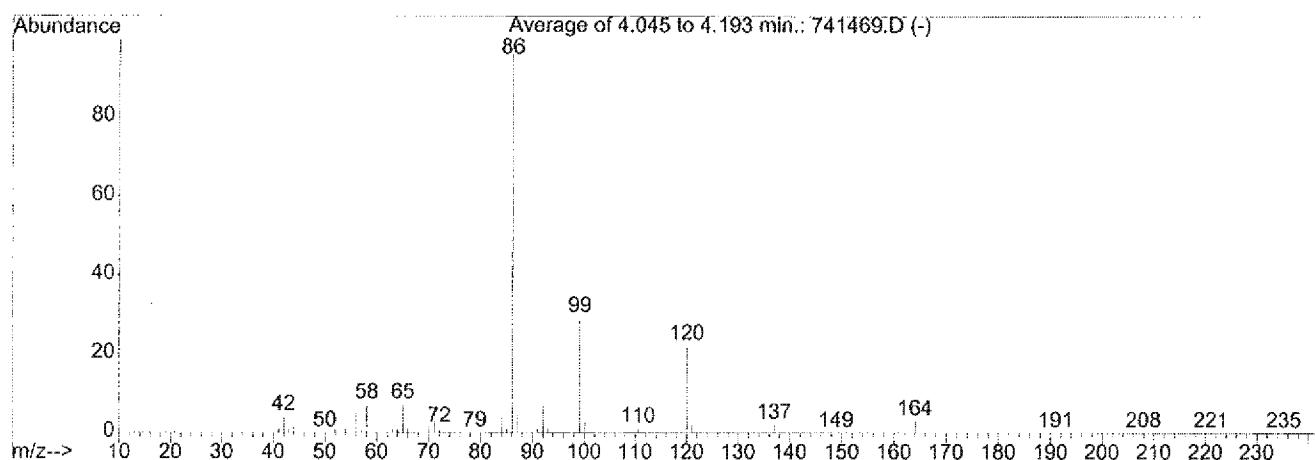
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q3-2010\SYSTEM7\09\_02\_10\741469.D  
 Operator : ASD  
 Date Acquired : 3 Sep 2010 00:06  
 Sample Name : XXXXXXXXXX  
 Submitted by : MGL  
 Vial Number : 69  
 AcquisitionMeth: DRUGS  
 Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
                   C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
                   C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
2	4.07	C:\DATABASE\NIST98.L		?
		Benzoic acid, 4-amino-, 2-(diethylamino)ethyl ester	000059-46-1	90
		Benzamide, 4-amino-N-[2-(diethylamino)ethyl]-	000051-06-9	83
		3-Aminobenzoic acid, 2-diethylamino-	1000193-23-3	64



# Area Percent / Library Search Report

**Information from Data File:**

File Name : F:\Q3-2010\SYSTEM7\09\_02\_10\741469.D  
Operator : ASD  
Date Acquired : 3 Sep 2010 00:06  
Sample Name : XXXXXXXXXX  
Submitted by : MGL  
Vial Number : 69  
AcquisitionMeth: DRUGS  
Integrator : RTE

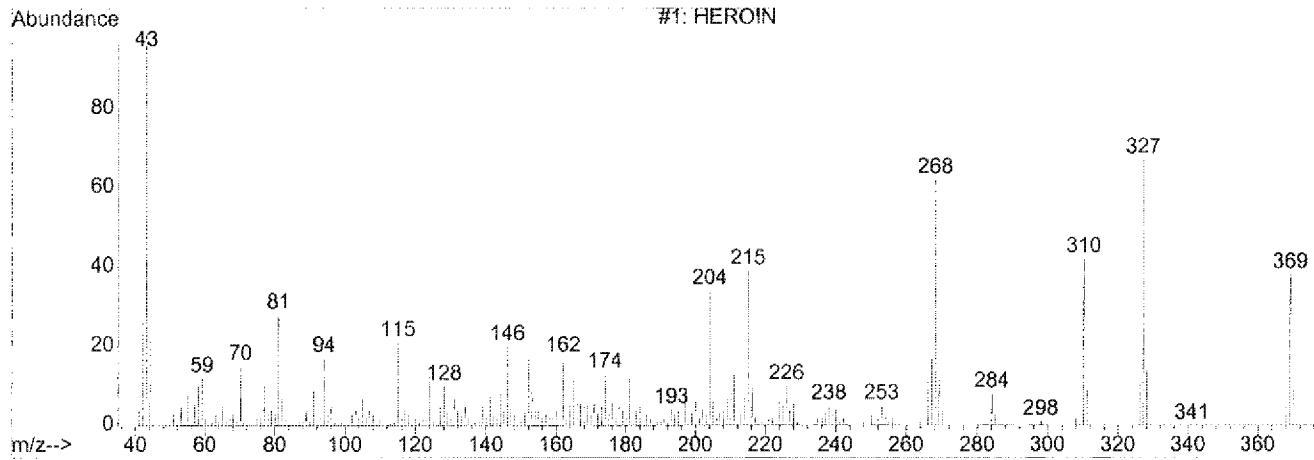
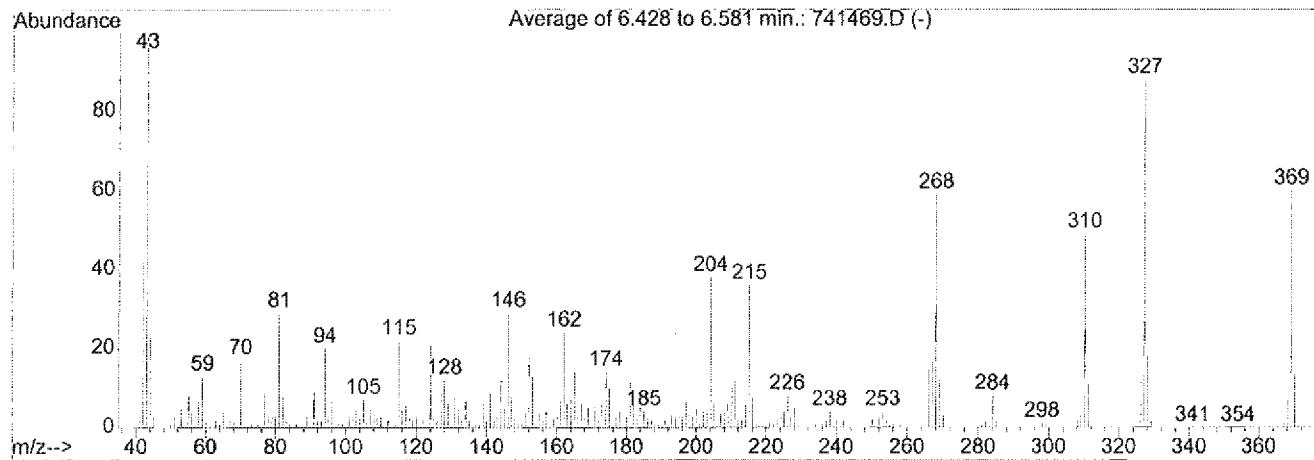
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Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
C:\DATABASE\NIST98.L

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PK#	RT	Library/ID	CAS#	Qual
3	6.47	C:\DATABASE\SLI.L HEROIN	000561-27-3	94

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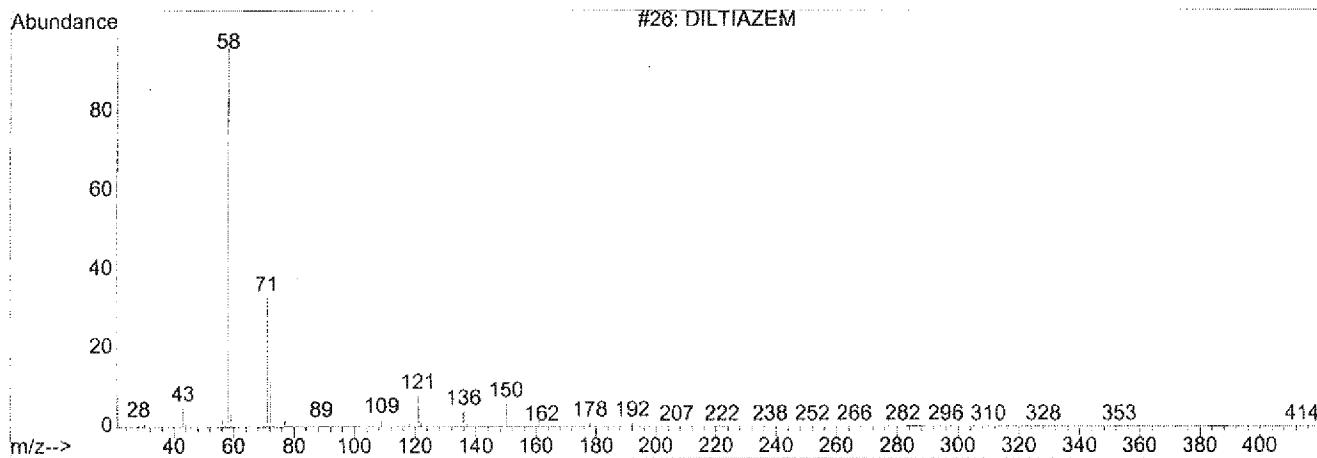
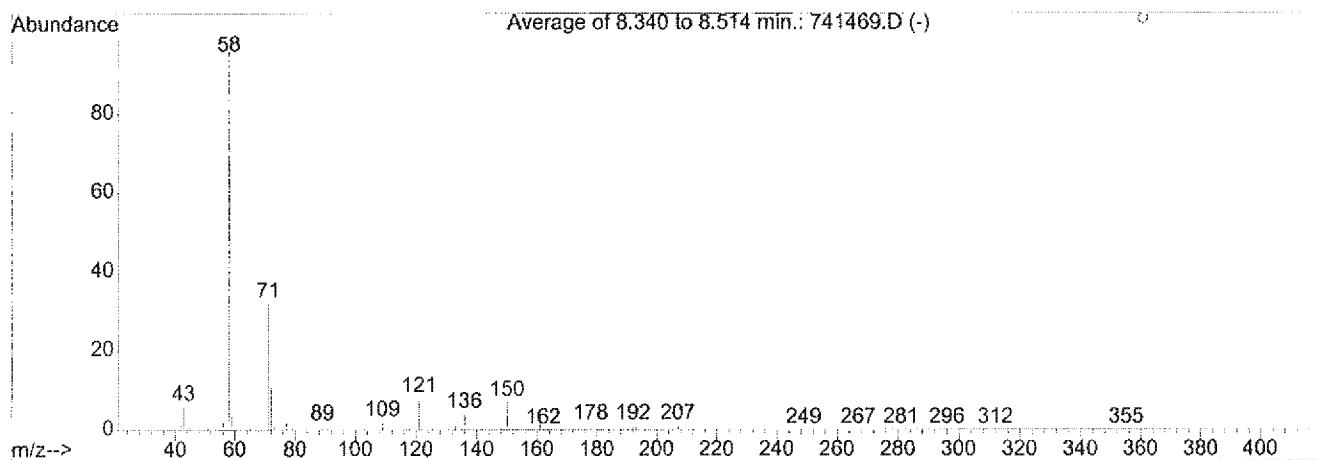
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**Information from Data File:**

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Date Acquired : 3 Sep 2010 00:06  
Sample Name : XXXXXXXXXX  
Submitted by : MGL  
Vial Number : 69  
AcquisitionMeth: DRUGS  
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
4	8.39	C:\DATABASE\SLI.L		
		DILTIAZEM	033286-22-5	91
		CITALOPRAM	059729-33-8	4
		CITALOPRAM	059729-33-8	4



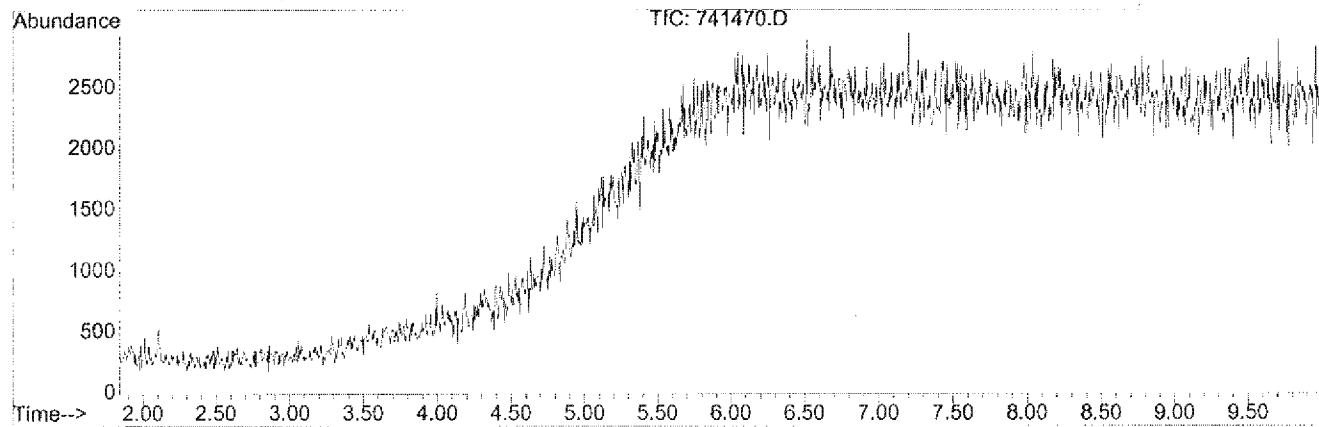
# Area Percent / Library Search Report

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File Name : F:\Q3-2010\SYSTEM7\09\_02\_10\741470.D  
Operator : ASD  
Date Acquired : 3 Sep 2010 00:18  
Sample Name : BLANK  
Submitted by : MGL  
Vial Number : 2  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

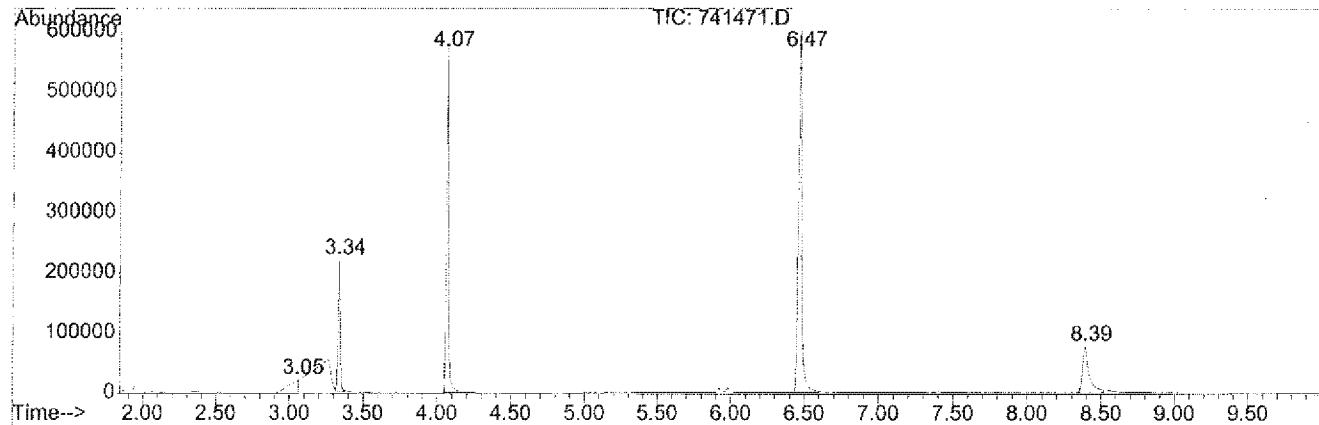
# Area Percent / Library Search Report

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**Information from Data File:**

File Name : F:\Q3-2010\SYSTEM7\09\_02\_10\741471.D  
Operator : ASD  
Date Acquired : 3 Sep 2010 00:31  
Sample Name : XXXXXXXXXX  
Submitted by : MGL  
Vial Number : 71  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
3.055	102287	5.00	11.03
3.336	210430	10.28	22.69
4.066	566310	27.67	61.05
6.465	927615	45.33	100.00
8.393	239773	11.72	25.85

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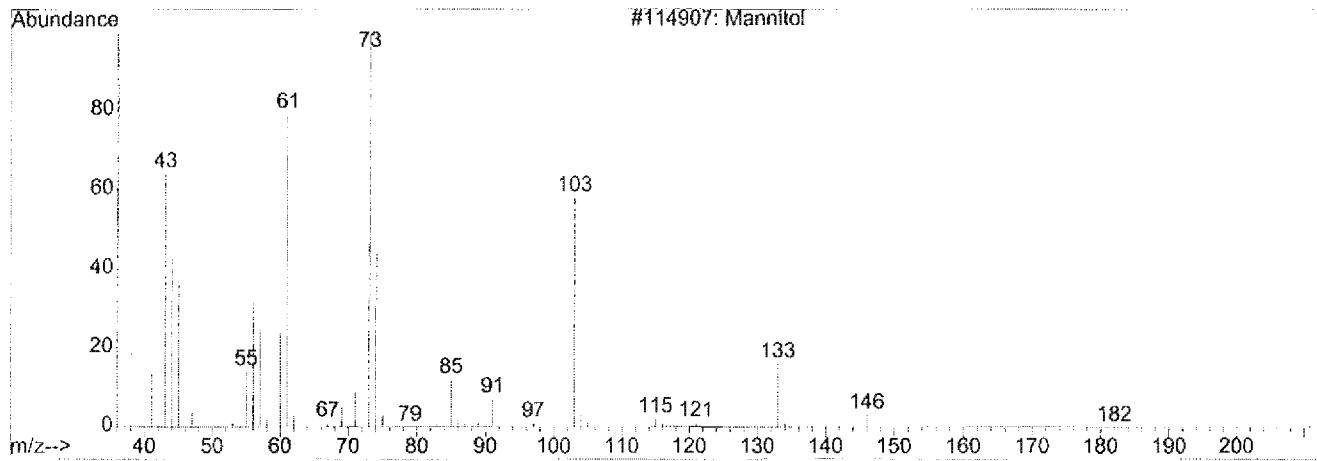
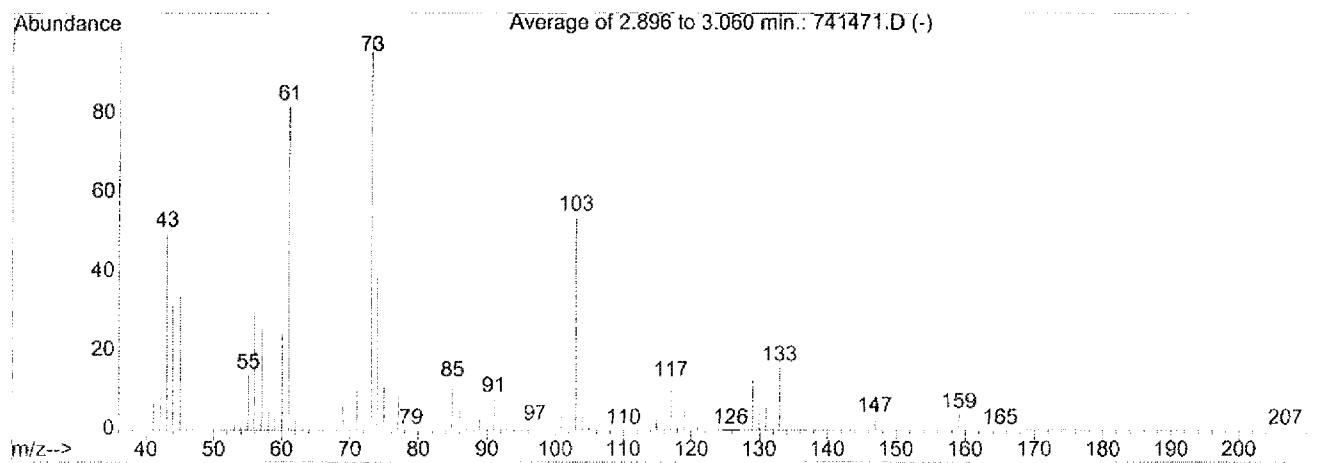
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**Information from Data File:**

File Name : F:\Q3-2010\SYSTEM7\09\_02\_10\741471.D  
Operator : ASD  
Date Acquired : 3 Sep 2010 00:31  
Sample Name : XXXXXXXXXX  
Submitted by : MGL  
Vial Number : 71  
AcquisitionMeth: DRUGS  
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	3.05	C:\DATABASE\NIST98.L		
		Mannitol	000069-65-8	87
		Sorbitol	000050-70-4	83
		Mannitol	000069-65-8	72



# Area Percent / Library Search Report

**Information from Data File:**

File Name : F:\Q3-2010\SYSTEM7\09\_02\_10\741471.D  
Operator : ASD  
Date Acquired : 3 Sep 2010 00:31  
Sample Name : XXXXXXXXXX  
Submitted by : MGL  
Vial Number : 71  
AcquisitionMeth: DRUGS  
Integrator : RTE

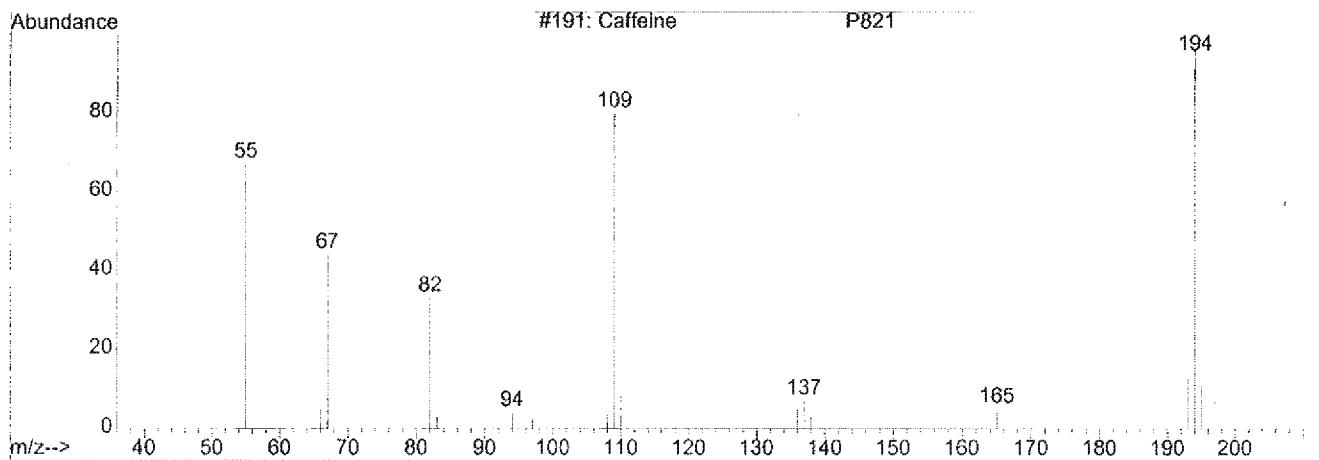
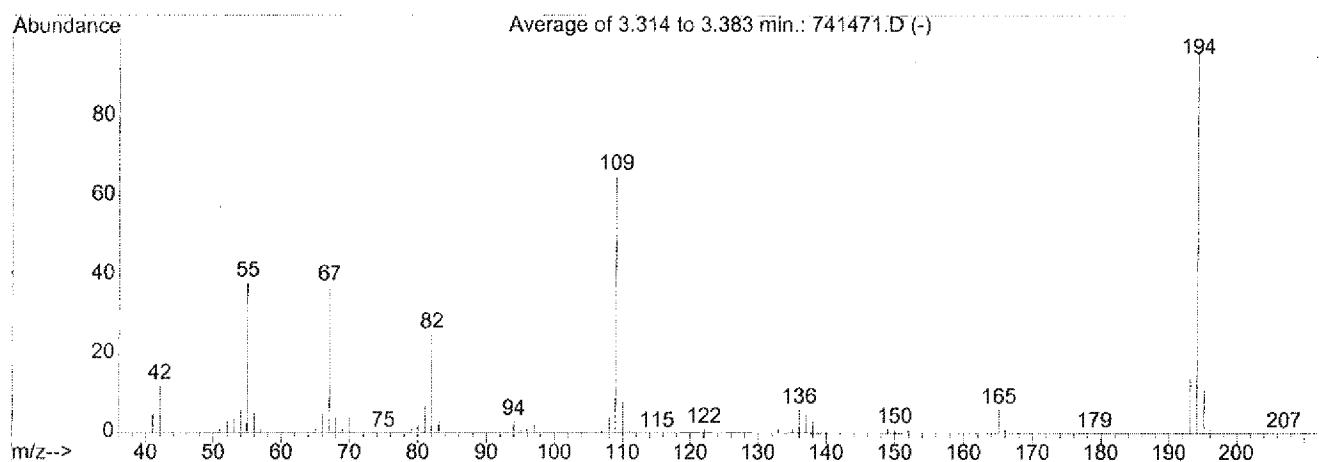
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Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
C:\DATABASE\NIST98.L

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PK#	RT	Library/ID	CAS#	Qual
2	3.34	C:\DATABASE\PMW_TOX2.L		
		Caffeine	000058-08-2	96
		Endogenous biomolecule 2AC	000000-00-0	9
		Proxyphylline	000603-00-9	4

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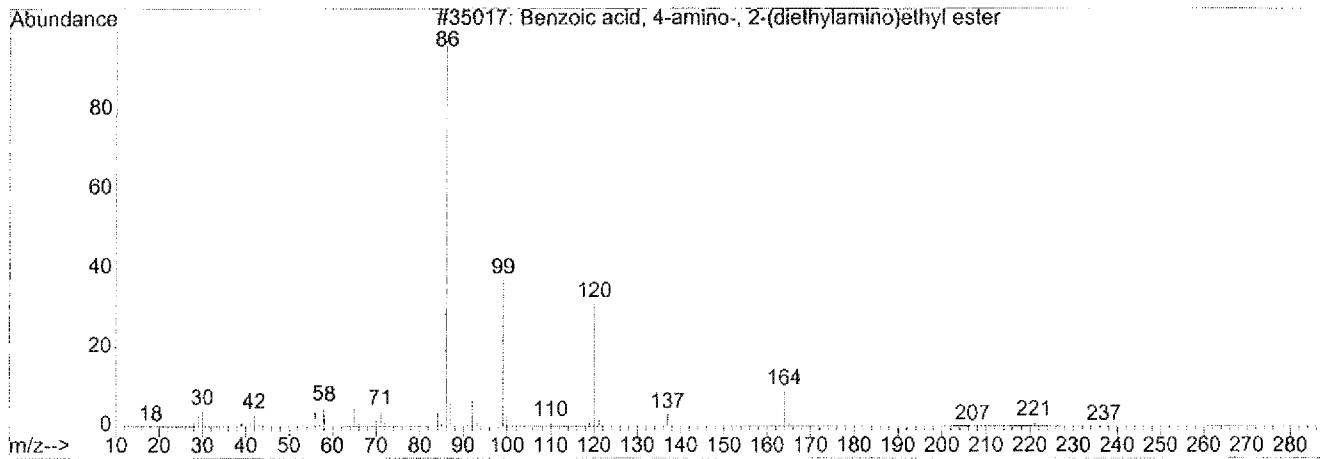
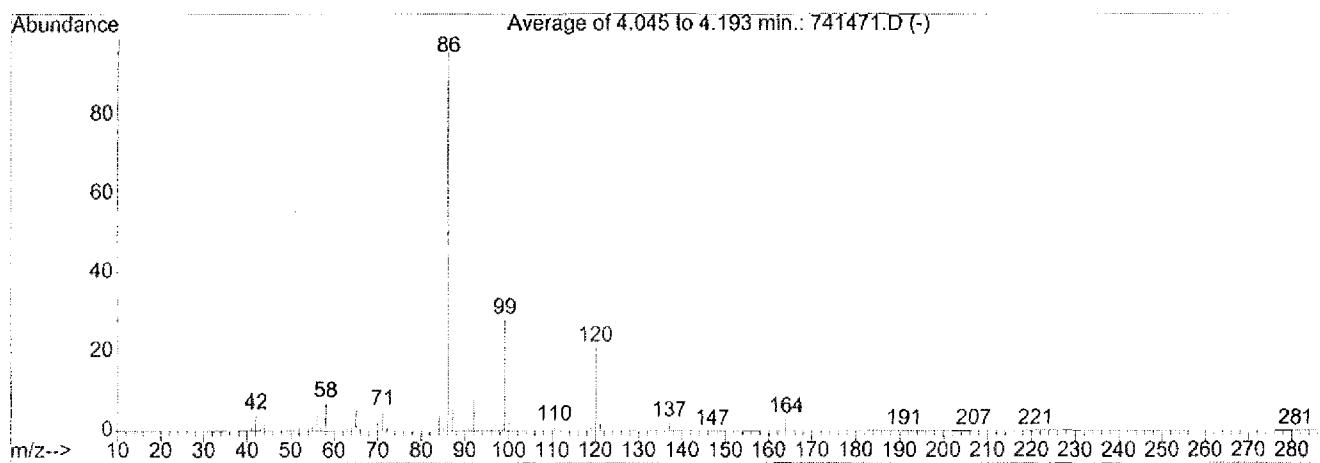
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**Information from Data File:**

File Name : F:\Q3-2010\SYSTEM7\09\_02\_10\741471.D  
Operator : ASD  
Date Acquired : 3 Sep 2010 00:31  
Sample Name : XXXXXXXXXX  
Submitted by : MGL  
Vial Number : 71  
AcquisitionMeth: DRUGS  
Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
3	4.07	C:\DATABASE\NIST98.L		
		Benzoic acid, 4-amino-, 2-(diethylamino)ethyl ester	000059-46-1	90
		Benzamide, 4-amino-N-[2-(diethylamino)ethyl ester]	000051-06-9	83
		Benzamide, 4-amino-N-[2-(diethylamino)ethyl ester]	000051-06-9	64



# Area Percent / Library Search Report

**Information from Data File:**

File Name : F:\Q3-2010\SYSTEM7\09\_02\_10\741471.D  
Operator : ASD  
Date Acquired : 3 Sep 2010 00:31  
Sample Name : XXXXXXXXXX  
Submitted by : MGL  
Vial Number : 71  
AcquisitionMeth: DRUGS  
Integrator : RTE

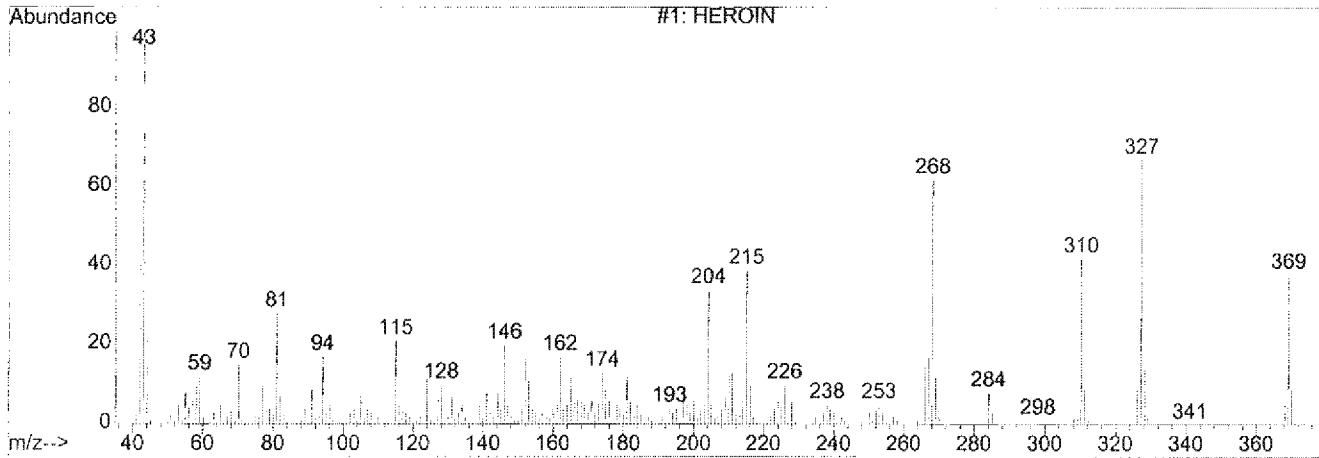
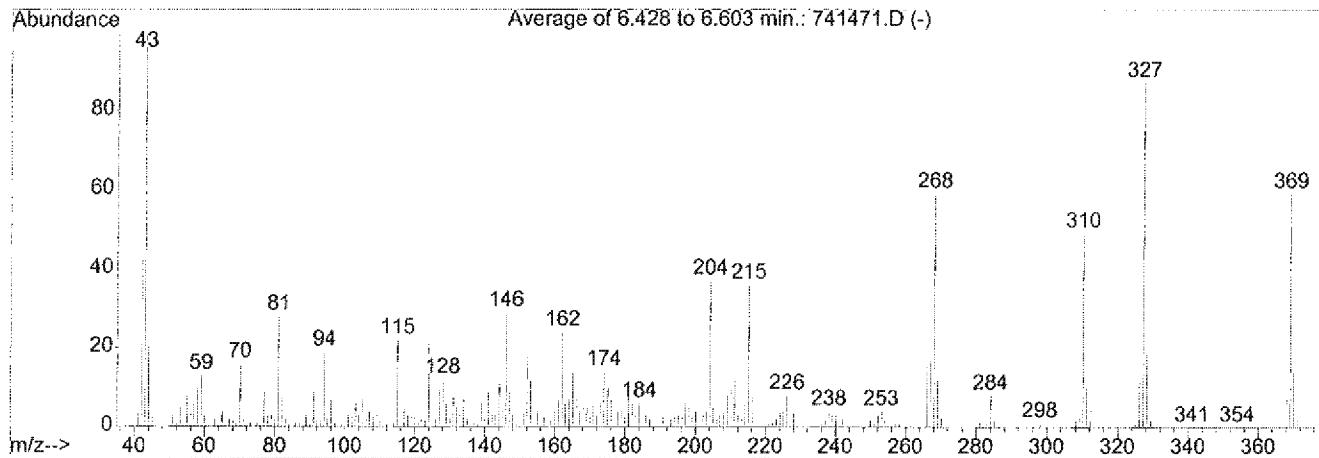
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Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
C:\DATABASE\NIST98.L

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PK#	RT	Library/ID	CAS#	Qual
4	6.47	C:\DATABASE\SLI.L HEROIN	000561-27-3	99

---



# Area Percent / Library Search Report

**Information from Data File:**

File Name : F:\Q3-2010\SYSTEM7\09\_02\_10\741471.D  
Operator : ASD  
Date Acquired : 3 Sep 2010 00:31  
Sample Name : XXXXXXXXXX  
Submitted by : MGL  
Vial Number : 71  
AcquisitionMeth: DRUGS  
Integrator : RTE

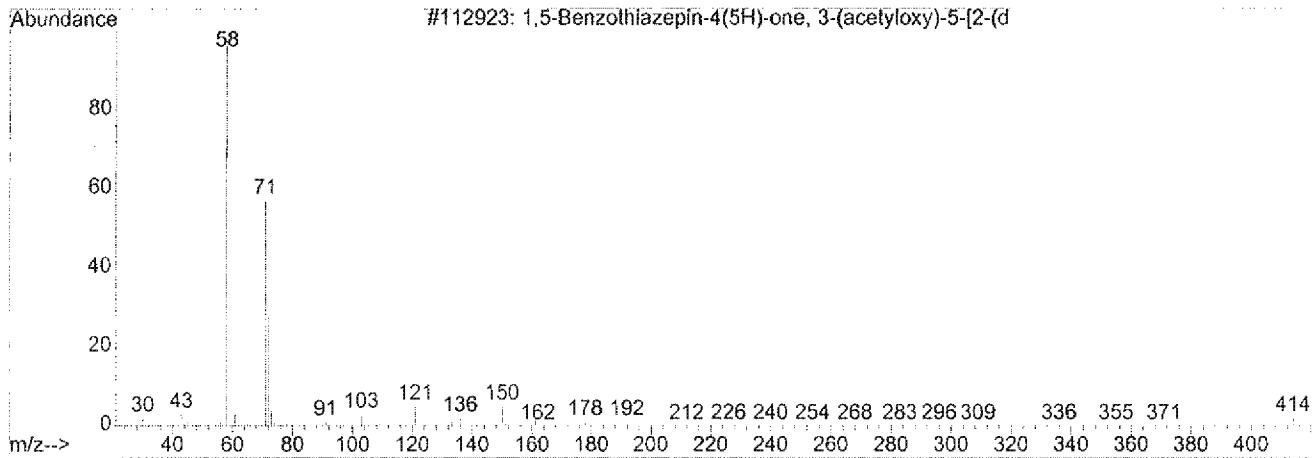
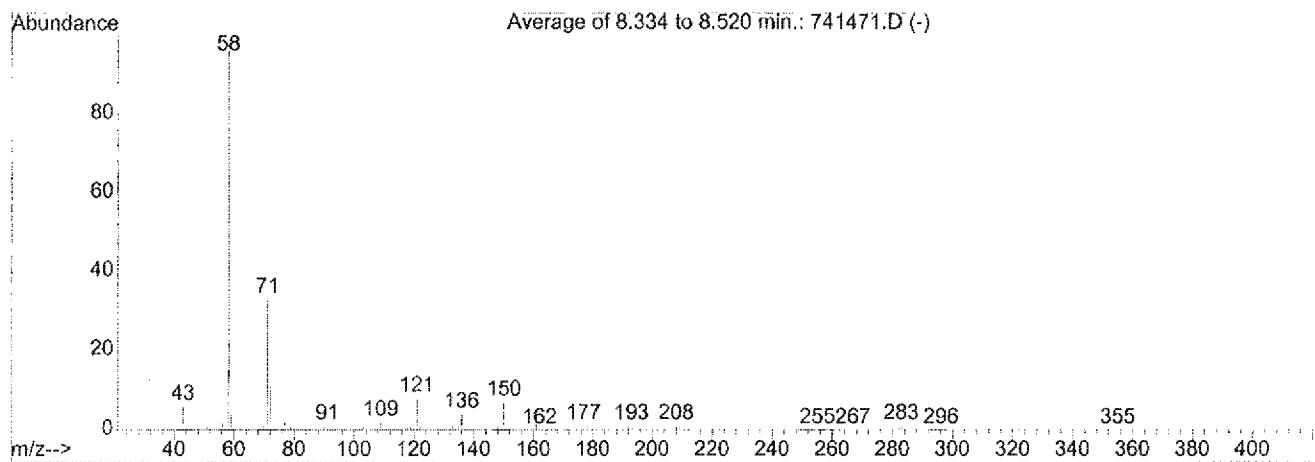
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Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
C:\DATABASE\NIST98.L

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PK#	RT	Library/ID	CAS#	Qual
5	8.39	C:\DATABASE\NIST98.L		
		1,5-Benzothiazepin-4 (5H)-one, 3-(ac	042399-41-7	53
		Propoxyphene	000469-62-5	47
		1,5-Benzothiazepin-4 (5H)-one, 3-(ac	042399-41-7	47

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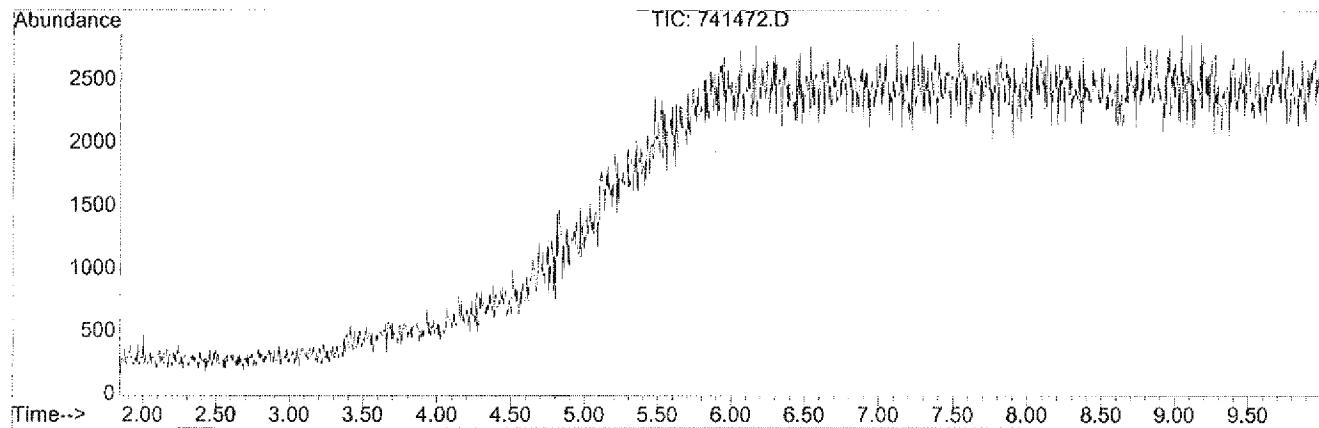


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Information from Data File:

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Operator : ASD  
Date Acquired : 3 Sep 2010 00:43  
Sample Name : BLANK  
Submitted by : SLD  
Vial Number : 2  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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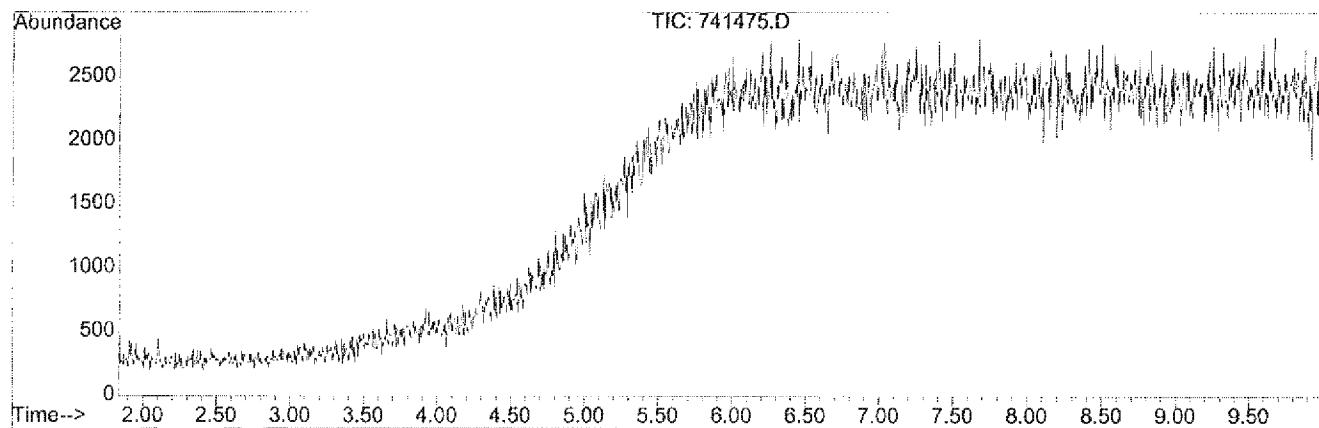
\*\*\*NO INTEGRATED PEAKS\*\*\*

---

Information from Data File:

File Name : F:\Q3-2010\SYSTEM7\09\_02\_10\741475.D  
Operator : ASD  
Date Acquired : 3 Sep 2010 1:21  
Sample Name : BLANK  
Submitted by :  
Vial Number : 2  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

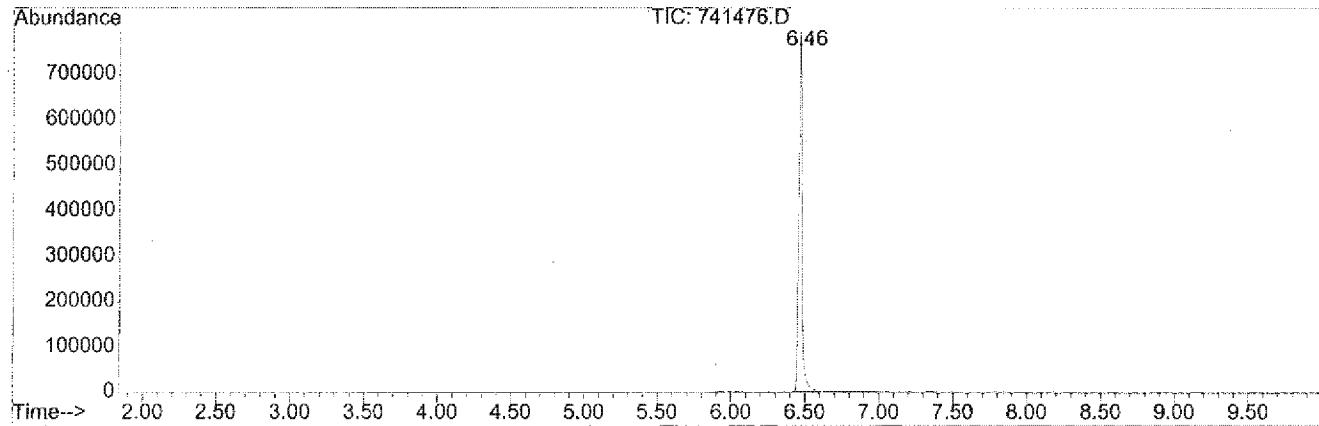
# Area Percent / Library Search Report

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## Information from Data File:

File Name : F:\Q3-2010\SYSTEM7\09\_02\_10\741476.D  
Operator : ASD  
Date Acquired : 3 Sep 2010 1:34  
Sample Name : HEROIN STD  
Submitted by :  
Vial Number : 76  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
6.465	1200447	100.00	100.00

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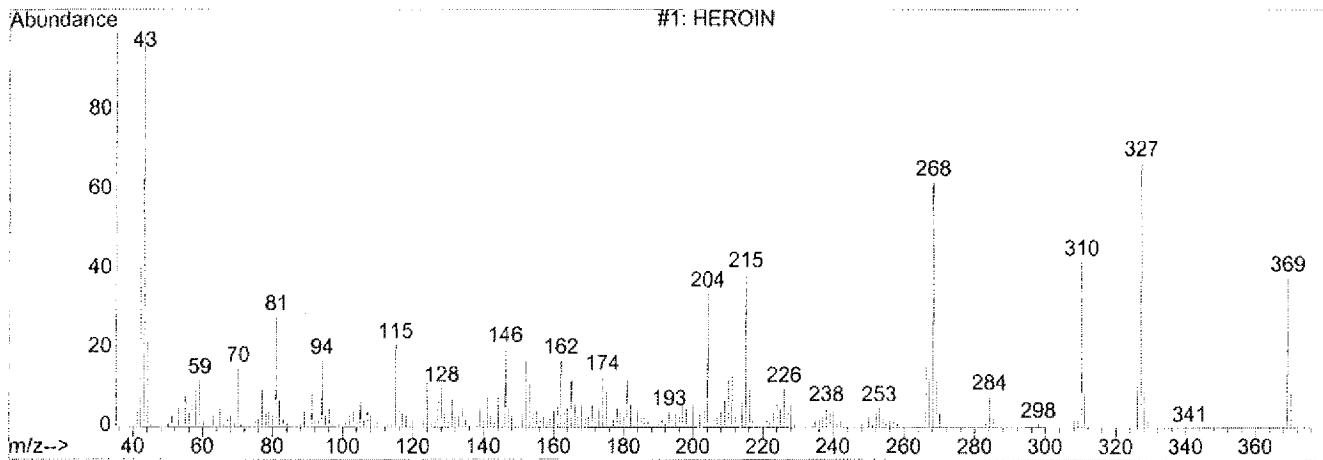
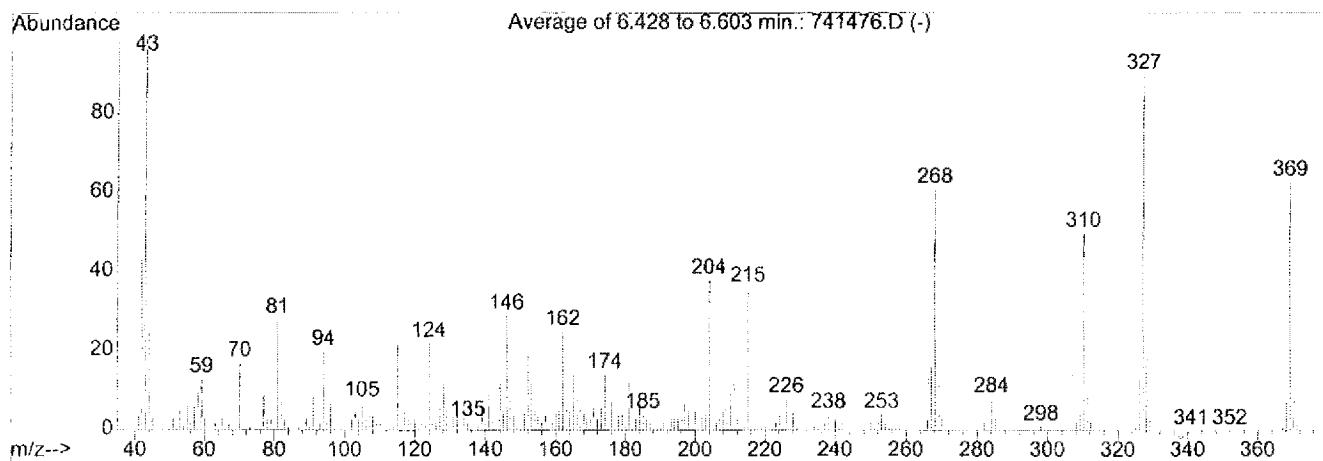
# Area Percent / Library Search Report

**Information from Data File:**

File Name : F:\Q3-2010\SYSTEM7\09\_02\_10\741476.D  
 Operator : ASD  
 Date Acquired : 3 Sep 2010 1:34  
 Sample Name : HEROIN STD  
 Submitted by :  
 Vial Number : 76  
 AcquisitionMeth: DRUGS  
 Integrator : RTE

Search Libraries: C:\DATABASE\SLI.L Minimum Quality: 90  
                   C:\DATABASE\PMW\_TOX2.L Minimum Quality: 90  
                   C:\DATABASE\NIST98.L

PK#	RT	Library/ID	CAS#	Qual
1	6.46	C:\DATABASE\SLI.L		
		HEROIN	000561-27-3	99
		JWH-073	208987-48-8	1



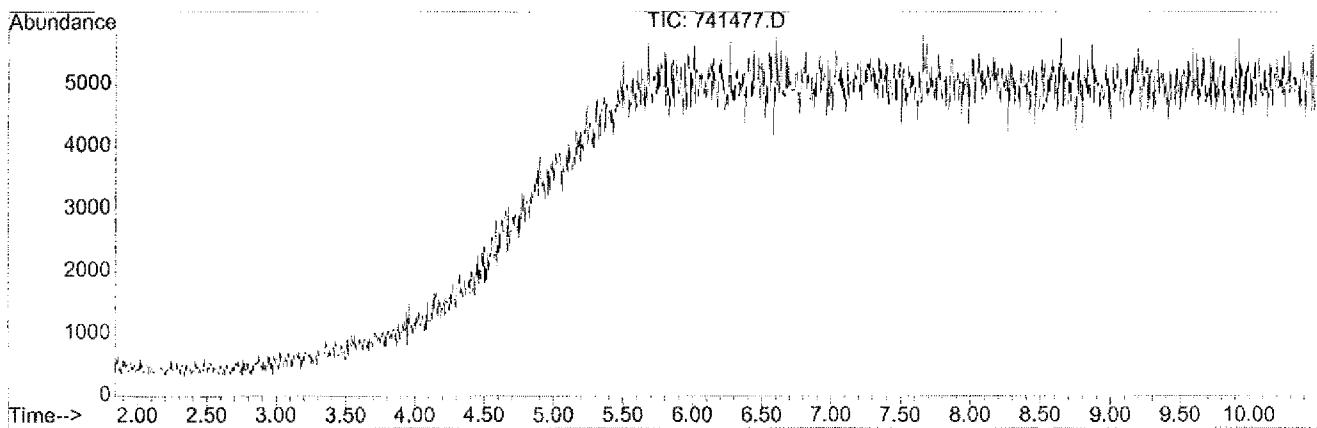
# Area Percent / Library Search Report

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## Information from Data File:

File Name : F:\Q3-2010\SYSTEM7\09\_02\_10\741477.D  
Operator : ASD  
Date Acquired : 3 Sep 2010 1:47  
Sample Name : BLANK  
Submitted by :  
Vial Number : 2  
AcquisitionMeth: CLONAZ  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

***Last page..... ...no further data***